



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,267	09/10/2003	Helmut Schlessmann	A 91825	4017

7590 04/18/2006

Walter Ottesen
Patent Attorney
P.O. Box 4026
Gaithersburg, MD 20885-4026

EXAMINER

SHARP, JEFFREY ANDREW

ART UNIT	PAPER NUMBER
----------	--------------

3677

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/658,267	Applicant(s) SCHLESSMANN, HELMUT	
	Examiner Jeffrey Sharp	Art Unit 3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

- [1] Claims 1-13 are pending.

Claim Rejections - 35 USC § 112

- [2] The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- [3] Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 has insufficient antecedent basis for the limitation "housing part". Therefore, the scope of the invention cannot be reasonably ascertained. Claims 2-13 suffer from dependency on deficient claim 1. In an effort to expedite prosecution, the claims have been examined as they are definite.

Claim 3 is indefinite, because it is dependent on both claims 1 and 2. Claim 1 states that the "partially exposed region between said housing part and said muffler" defines "a cooling surface". Claim 2 states that "a collar extending peripherally about said attachment pin" defines "a cooling surface". Claim 3 states "said cooling surface" (line 4). It cannot be determined which "cooling surface" the slot is a part of.

Claim Objections

- [4] Claim 2 is objected to because of the following informalities:

It appears the word "attachment" (line 2) should be --arrangement--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

- [5] The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- [6] As they are understood, claims 1-6 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by US-5,906,477 to Kim et al. (see Figures 3b and 3c).

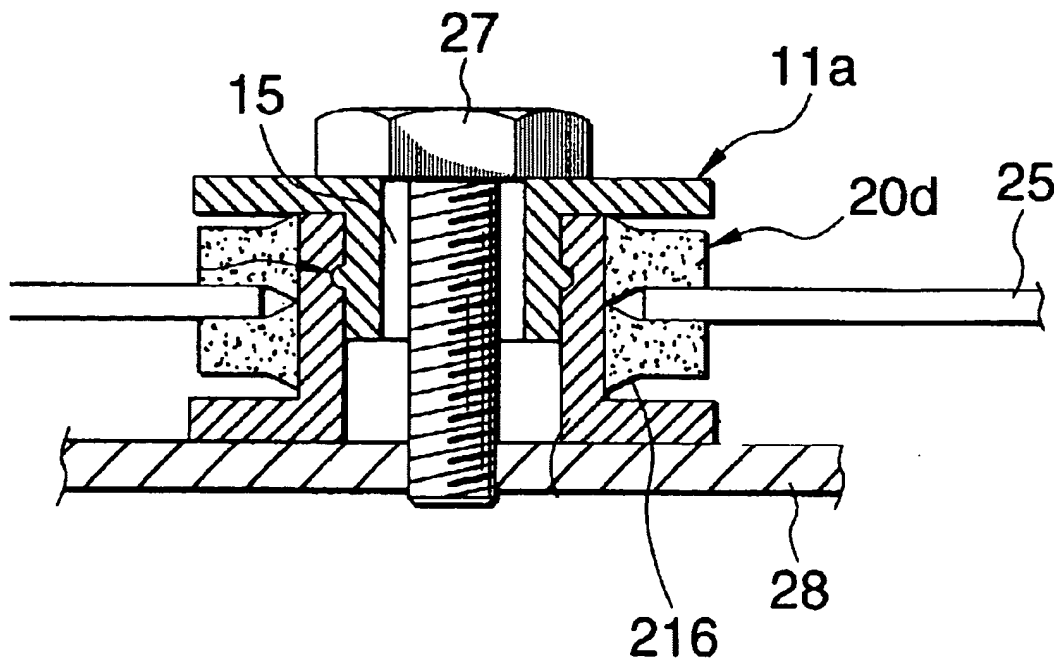
In short, Kim et al. teach an attachment pin arrangement for attaching an exhaust-gas muffler (210) to an apparatus (not labeled) comprising an attachment pin (223) having an exposed region between the housing part??? and muffler (210) defining a cooling surface (inherent). The attachment pin (223) has a collar (226) extending peripherally about the pin (226), as well as a second collar (227) adjacent said collar (226), and further comprises a slot (228) extending peripherally about the attachment pin (223). Both collars are integral with said

Art Unit: 3677

attachment pin as a single integral piece. The attachment pin (223) has a threaded section (extreme left of Figure 3c), and the collar (226) is configured to have a shape of a hexagon.

[7] As they are understood, claims 1-4, 6, 7, 12, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Niwa et al. US-6,328,513.

In short, Niwa et al. teach an attachment pin arrangement for attaching an exhaust-gas muffler (25) to an apparatus (28) comprising an attachment pin (27) having an exposed region between the housing part??? and muffler (25) defining a cooling surface (inherent near 15). The attachment pin (27) has a collar (extreme top of 27) extending peripherally about the pin (27), as well as a second collar (11a) adjacent said collar, and further comprises a slot (thread) extending peripherally about the attachment pin (27). The attachment pin (27) has a threaded section, and the collar is configured to have a shape of a hexagon. A heat insulating spacer (20d) is located between a holding flange of the muffler (25) and said collar. The spacer (20d) has a centering collar (216).



Claim Rejections - 35 USC § 103

- [8] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- [9] As they are understood, claims 1-5, 8-11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over US-5,333,978 in view of Niwa et al. US-6,328,513.

In short, Rives teaches an attachment pin arrangement for attaching a first member (30) to a second member (20) comprising an attachment pin (12) having an exposed region between the housing part??? and the first member (30) defining a cooling surface (inherent). The

Art Unit: 3677

attachment pin (12) has a collar (13) extending peripherally about the pin (12), as well as a second collar (13a) adjacent said collar, and further comprises a slot (thread 11) extending peripherally about the attachment pin (12) and also defining a cooling surface???. The attachment pin (12) has a threaded section to engage one of the first (30) and second (20) members. A heat insulating spacer (not labeled) is located between a holding flange of the first member (30) and a holding nut (40) threadably engaging the attachment pin (12). The spacer is configured to be a support washer, and may be made of any desired material (e.g., titanium or duroplast), as it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Rives acknowledges that variations in his attachment pin arrangement is expected by those of ordinary skill (col. 3 lines 20-22).

However, Rives fails to disclose expressly, the first member (30) to be a muffler, and the second member (30) to be a housing part???

Niwa et al. suggest that it is advantageous to isolate a muffler component (25) from a housing part (28) for the purposes of decreasing noise and vibration.

Therefore, it would have been obvious to one of ordinary skill in the art, to modify the first and second members taught by Rives to be a muffler and housing part, respectively, as suggested by Niwa et al., in order to make advantageous use of the sealing characteristics of Niwa et al.'s fastener. Moreover, Rives would have acknowledged that his fastener could be advantageously used in a connection between a muffler and housing part.

Art Unit: 3677

[10] Claims 1-5, 8-11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown US-1,574,466 in view of Kim et al. US-5,906,477.

In short, Brown teaches an attachment arrangement for attaching a first member (10) to a second member (11) comprising an attachment pin (Figure 3) having an exposed region (15c) between the housing part??? and the first member (10) defining a cooling surface (inherent). The attachment pin (Figure 3) has a collar (15d) extending peripherally about the pin, as well as a second collar (15d) adjacent said collar, and further comprises a slot (15c) extending peripherally about the attachment pin and also defining a cooling surface???. The attachment pin has at least one threaded section to engage one of the first (10) and second (11) members. A heat insulating spacer (not labeled) is located between a holding flange (10b,10c) of the first member (10) and a holding nut (15b) threadably engaging the attachment pin. The spacer is configured to be a support washer, and may be made of any desired material (e.g., titanium or duroplast), as it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Brown discloses that the connection is to be used in non-rotary applications (page 1 lines 57-58)

However, Brown fails to disclose expressly, the first member (10) to be a muffler, and the second member (11) to be a housing part???

Kim et al. suggest that muffler components are commonly joined to a housing parts using attachment pins.

Therefore, at the time of invention, it would have been obvious to one of ordinary skill in the art to modify the first and second members taught by Brown to be a muffler and housing part,

Art Unit: 3677

respectively, as suggested by Kim et al., in order to make advantageous use of the improved shear characteristics of Brown's fastener in muffler applications. Moreover, Brown would have acknowledged that his fastener could be advantageously used in a connection between a muffler and housing part.

Conclusion

[11] The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is as follows:

When given their broadest reasonable interpretation...

US-6,328,513 (Figure 1) appears to anticipate claims 1-4 and 13.

US-6,328,513 (Figure 2) appears to anticipate claims 1-4 and 13.

US-6,202,785 (Figure 6) appears to anticipate claims 1-5 and 13.

US-5,77,898 (Figure 2) appears to anticipate claims 1 and 13.

US-6,209,678 (Figure 1) appears to anticipate claims 1-3 and 13.

US-4,299,305 appears to anticipate claims 1-7 and 13.

US-4,749,058 appears to anticipate claims 1-6 and 13.

US-5,611,409 appears to anticipate claims 1 and 13.

US-3,783 appears to anticipate claims 1-6 and 13.

US-3,208,551 appears to anticipate claims 1-3, 6, and 13.

US-3,137,365 appears to anticipate claims 1-3, 6, and 13.

Applicant is reminded that things clearly shown in reference patent drawings qualify as prior art

Art Unit: 3677

features, even though unexplained by the specification. *In re Mraz*, 173 USPQ 25 (CCPA 1972), and that claims in a pending application should be given their broadest reasonable interpretation. *In re Pearson*, 181 USPQ 641 (CCPA 1974). In the instant case, a thread of the prior art may be broadly construed as a "slot extending peripherally around the attachment pin".

Other pertinent art:

US-4,729,707 (Figures 16-19)

US-3,680,659

US-4,134,472

US-6,164,410

See form PTO-892.

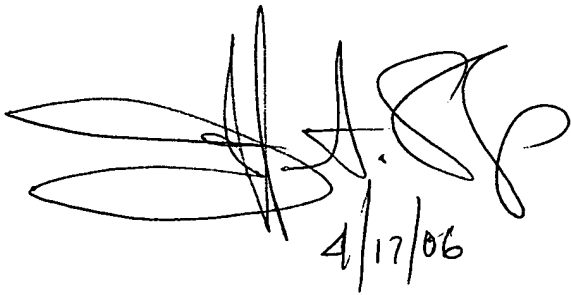
[12] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Sharp whose telephone number is (571) 272-7074. The examiner can normally be reached 7:00 am - 5:30 pm Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on (571) 272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

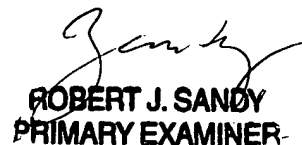
Art Unit: 3677

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAS



Handwritten signature and date: 4/17/06



ROBERT J. SANDY
PRIMARY EXAMINER